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Do Sector Wide Approaches for health aid delivery lead to 'donor-flight'? A comparison of 46 low-income countries

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ABSTRACT

Sector Wide Approaches (SWAp) emerged during the 1990s as a new policy mechanism for aid delivery. Eschewing many features of traditional project-based aid, SWAps give greater control of aid allocation to recipient countries. Some critics have questioned whether reducing a donor's level of influence over aid allocation might lead to a decrease in donor contributions. While some qualitative evaluations have described the level of fund pooling and donor participation in SWAps, no previous study has empirically examined this potential 'donor-flight' response to health SWAp implementation. This paper utilises a uniquely compiled dataset of 46 low-income countries over 1990–2009 and a variety of panel data regression models to estimate the impact of health SWAp implementation on levels of health aid. Results suggest that amongst 16 especially poor low-income countries, SWAp implementation is associated with significant decreases in health aid levels compared with non-implementers. This suggests donors are not indifferent to how their contributions are allocated by recipients, and that low-income countries considering a SWAp may need to weigh the benefits of greater control of aid allocations against the possibility of reduced aid income.

Introduction

The Sector Wide Approach (SWAp) emerged in the mid-1990s as a coordination and harmonisation mechanism for the delivery of development aid. A program-based approach to aid delivery applied at a sector level, health SWAps have been implemented in around 30 aid recipient countries. The principles of this approach were designed to allow developing countries greater control over how aid receipts were managed and allocated. The move to SWAp amounted to a rejection of project-based aid delivery; criticised for lacking local ownership, overloading already limited local capacity, and prioritising aims and strategies of donors over those of recipients (Chansa, Sundewall, McIntyre, Tomson, & Forsberg, 2008; Foster, 2000; Jefferys & Walford, 2003).

The last ten years has seen a fourfold increase in development assistance for health (DAH) to low and middle-income countries, the majority of which has been project-based (Piva & Dodd, 2009; Ravishankar et al., 2009). This rapid increase in project-based DAH has driven many stakeholders and commentators to call for greater uptake of aid delivery mechanisms like health SWAps, even in the most fragile states (International Dialogue for Peacebuilding and Statebuilding, 2011; OECD Development Co-operation Directorate, 2010; Piva & Dodd, 2009).

The argued benefits of SWAps are attractive. However, donors may be hesitant to provide aid where there is high risk of misuse (Tierney et al., 2011), or if their preferences are misaligned with a country's SWAp arrangements (Foster, Brown, & Conway, 2000). It is therefore plausible that implementation may cause an unintended 'donor-flight' response, where donors reduce or even cease future disbursements. This would exacerbate the challenges of providing care in already financially constrained health systems.

Previous evaluations of the SWAp have relied on case studies (Chansa et al., 2008; Jefferys & Walford, 2003; Negin & Hort, 2010; Vaillancourt, 2009). There has been a tendency to set the question of donor preferences for SWAp to one side, preferring instead to evaluate SWAp against certain operational and administrative outcomes (such as reporting and administrative burdens borne by local administrations). While some SWAp evaluations describe levels of fund-pooling and donor participation, no previous study has estimated the relationship between SWAp implementation and DAH. This is the first to quantify the hypothesised 'donor-flight' response and the first to conduct large scale empirical analyses of the impact of SWAp on health care financing. It utilises a uniquely compiled panel dataset of DAH receiving countries from 1990 to 2009 and employs fixed effects and dynamic panel data regressions

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to credibly assess the impact of introducing a SWAp on DAH received amongst low-income countries.

Background

A brief overview of health SWAps

SWAps have been operationalised differently across countries (Hill, 2002; Jefferys & Walford, 2003; Negin & Hort, 2010; Schacter, 2001; Sundewall & Sahlin-Andersson, 2006; Walford, 2003). Under a text-book implementation, donors provide pooled funds for generalised sector support to a recipient country; and harmonise reporting requirements under a formal agreement with the recipient government (Foster, 2000). In practice, partial-pooling is more common (Chansa et al., 2008; Jefferys & Walford, 2003; Negin & Martiniuk, 2012).

Such aid delivery mechanisms are expected to lead to increased local ownership of aid-funded health programmes and a greater respect for recipient health programme priorities funded from DAH. Further benefits are argued to flow from reduced burden of managing donors, strengthened relationships between government and donor partners, and strengthened recipient country capacity to manage DAH (Foster et al., 2000). High level multi-lateral forums such as the Paris Declaration on Aid Effectiveness in 2005 and the Accra Agenda for Action in 2008 have endorsed such aid delivery approaches (OECD Development Co-operation Directorate, 2010).

The limited evidence available suggests that many of the assumed benefits of SWAp may be slow to materialise (Hutton & Tanner, 2004; Sundewall & Sahlin-Andersson, 2006). Moreover, Foster (2000) and Knack and Rahman (2007) argue donors can have a preference for tied aid in order to achieve private goals, with results that are observable and directly attributable to their activities. Thus, it is important to consider exactly how donors might respond to moves from project-based funding to more general budget support for health under the SWAp.

Donor preferences and the 'donor-flight' response

Recipients should know their own needs and preferences better than donors and as such, prefer general budget support to tied aid. However, "*…donors are not indifferent to the consumption choices of recipients*" (Daly & Giertz, 1972, p.132). Private transfers through NGOs are frequently tied to relief from the effects of natural disasters, containment of epidemic diseases, delivery of specific health interventions, or delivery of aid that targets specific individuals (Daly & Giertz, 1972; Dodd, Schieber, Cassels, Fleisher, & Gottret, 2007; Rice, 1998). Further, where the risk of corruption or waste is perceived to be higher for untied DAH disbursements, donors may again have a preference for tied aid. Many donors have subscribed to a need and merit approach to aid, directing more aid to countries with "*good policies*" and track records of sound public sector management and project implementation (Tierney et al., 2011, p.1894).

Such preferences imply the relevant choice may not be between pooled health funding of a certain amount and health projects of equivalent value (Daly & Giertz, 1972). Allowing donors to tie grants to specific purposes may increase the pool of available funds (Rice, 1998). Conversely, where donor preferences cannot be reconciled with a SWAp, donor commitment "*may be weakened*" (Foster et al., 2000, p.17); potentially resulting in 'donor-flight' via a withdrawal of existing contributions and/or by deterring future contributions from new or existing donors. This 'donor-flight' response has much support in experimental economics literature on charitable giving. Dictator games have demonstrated an increased propensity to donate when donations are tied/in-kind rather than untied (Brañas-Garza, 2006; Breman, Granström, & Masiyex, 2009; Currie & Gahvari, 2008; Helms, Scott, & Thornton, 2012; Li, Eckel, Grossman, & Brown, 2011).

The move to a SWAp may produce unintended consequences by reducing DAH receipts compared to the counterfactual of predominantly project-based donor funding; exacerbating the challenge for a government to provide essential health services (Foster et al., 2000). Less pessimistically, it may be that 'donor-flight' is more than offset by increased contributions from those donors with preferences that are more consistent with SWAp design and implementation. Finally, it may be that 'donor-flight' is quantitatively unimportant such that the move to SWAp leaves total DAH largely unchanged as compared to the counterfactual of predominantly project-based donor funding.

Empirical strategy

Model specifications

Main specifications

To test whether there were any significant changes in DAH received by countries implementing health SWAps, we first applied a difference-in-differences (DID) modelling approach (equation (1)). Secondly, to minimise potential simultaneity bias not sufficiently captured by persistent explanatory variables in equation (1), we apply dynamic panel data methods (equation (2)), including a one-year lag of the dependent variable ($\log(DAH)_{it}$), the logged level of DAH received by country i in year t. Specifically, we estimated the following semi-logarithmic linear fixed-effects models of DAH for country i in year t:

$$\begin{aligned}\log(DAH)_{it} &= \alpha_i + \delta SWAp_{it} + \beta_1 \log(GDP/capita)_{it} \\ &\quad + \beta_2 \log(population)_{it} + \beta_3 \text{no\_donors}_{it} \\ &\quad + \beta_4 \text{life\_expectancy}_{it} + \mu_t + \varepsilon_{it} \end{aligned} \quad (1)$$

$$\begin{aligned}\log(DAH)_{it} &= \alpha_i + \delta SWAp_{it} + \phi \log(DAH)_{it-1} \\ &\quad + \beta_1 \log(GDP/capita)_{it} + \beta_2 \log(population)_{it} \\ &\quad + \beta_3 \text{no\_donors}_{it} + \beta_4 \text{life\_expectancy}_{it} + \mu_t + \varepsilon_{it} \end{aligned} \quad (2)$$

where α_i is a country-specific fixed-effect capturing time-invariant country characteristics, $SWAp_{it}$ is a dummy variable indicating that country i has a health SWAp policy in year t, $GDP/capita_{it}$ is gross domestic product per capita, $population_{it}$ is total estimated population, no_donors_{it} is the number of country-level bilateral, multilateral and (major) private donors, $life\_expectancy_{it}$ is average life expectancy at birth, μ_t are year fixed-effects, and ε_{it} is a random error term. Some variables have been log transformed to normalise their distributions and aid interpretation of regression coefficients. Monetary amounts in the analysis are valued in current (2011) US dollars and all regressions cluster the standard errors at the country level.

Difference and system generalised method of moments (GMM) approaches are employed for dynamic panel data estimations to control for endogeneity of the included lagged dependent variable (Arellano & Bond, 1991; Blundell & Bond, 1998). GMM application to country-level DAH data has been found to be sensitive to restrictions (Mishra & Newhouse, 2009; Wilson, 2011) and these methods are most suited to samples with larger N and smaller T than our panel. Thus, we follow Roodman's (2009a, 2009b) criteria for model selection (within upper/lower bounds on the coefficient of the lagged dependent variable, Hansen test statistics in the acceptable range, acceptable levels of instrument proliferation given N) and follow others in presenting results from both DID and GMM specifications (Chong & Gradstein, 2008; Mishra & Newhouse, 2009; Wilson, 2011).